



BADGER STATE Smoke Signals

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Vol. 18 No. 3

Baraboo, Wisconsin
207th Consecutive Monthly Issue

March 1987

Return To: Kenneth A. Ebner K9EN
822 Wauona Trail, Portage WI 53901

Novice Enhancement Action Taken

FCC today (February 10, 1987) released the Report and Order in PR Docket 86 161, Novice Enhancement. The rules become effective 0001 UTC March 21, 1987, a Friday night, local time.

Specific rules changes are:

- (1) Novices and Technicians may operate 28.1 through 28.5 MHz, using CW and digital modes from 28.1 to 28.3 and CW and voice modes from 28.3 to 28.5 MHz. Novice and Technician control operators are limited to 200 watts output in this band, but other licensees are not similarly limited.
- (2) Novices may use up to 25 watts in the 222.10 through 223.91 MHz band, with all authorized emissions.
- (3) Novices may use up to 5 watts in the 1270 through 1295 MHz band, with all authorized emissions.
- (4) No Amateur station at which the control operator or station licensee holds a Novice class operator license shall be in repeater, auxiliary, or beacon operation.
- (5) Two examiners will be required to administer future Novice exams, which shall consist of 30 questions. FCC form 610 will be revised to provide for certification by two VEs.
- (6) Present Novice and Technician licensees are grandfathered into the new privileges.
- (7) Element 3 is divided into two parts, 3A and 3B, with each examination to consist of 25 questions. Present Technician licensees will be given credit for having passed both elements. In the future, upgrades to Technician will only have to pass element 3A and future Technicians upgrading to General will have to pass both elements 1B, 13 WPM, and element 3B.

The complete text of the new rules will appear in April QST.

(ARRL Bulletin NR 13A, Feb. 10, 1987)

ARRL Board Meets

The ARRL Board of Directors held its annual meeting in Hartford on January 16 and 17, 1987.

In the reports of officers, plans for expending in 1987 a quarter of a million dollars on the League portion of programs to recruit new people into Amateur Radio were revealed.

Later in the meeting, the Board created an education task force which would be staffed largely by volunteers from the educational field. It would review and update curricula for the teaching of Amateur Radio classes.

The Executive Vice President is also to explore with Amateur Radio industry representatives ways to show the general public about Amateur Radio including, but not limited to, a mobile van display.

The Board reopened until June 1 the bidding process for the Diamond Jubilee National Convention in 1989. See Minute 31, page 62 March 1986 QST for details. The 1988 national convention at Portland, Oregon was rescheduled to September 9 to 11, 1988.

The Board accepted the report of its Blue Ribbon Committee on Amateur Radio emergency communications, and adopted its call for creation of a permanent public service steering committee.

The Board thanked the ad hoc committee on Amateur Radio digital communication for its work to date. The committee was also asked to develop a proposal for facilitating message handling via Packet Radio. The sixth ARRL Amateur Radio computer networking conference was authorized for August 29, 1987 in the Los Angeles area.

The Board took another step toward refurbishing W1AW and adding a visitors center at HQ. The officers and staff will develop and implement a plan for the raising of funds for construction, maintenance and related improvements to the property. A committee for the museum will be established, to ensure that the focus of this aspect of the project is on the future. No

funds are to be expended for architectural or engineering development until 10 percent of a fundraising goal shall have been achieved. Progress will be reviewed by the full Board before the bidding process starts, and regular reports will be made through QST.

Serving on the Executive Committee in addition to President Price, First Vice President Holladay and Executive VP Sumner, until the 1988 annual meeting, will be Directors Frank M. Butler, Jr., W4RH, Paul Grauer, WØFIR, Clyde O. Hurlbert, W5CH and George S. Wilson, W4OYL.

A revised travel policy was adopted to recognize changes adopted in the tax reform bill.

The present PR Advisory Committee will be replaced at the end of 1987 by a public relations committee staffed by expert volunteers. In the meantime, it has the task of studying a TV series designed to interest the viewer in becoming an Amateur. The Board created an ad hoc committee to draft ethical guidelines for Amateur Radio/media contact.

The Board strongly supported a new membership service, the timely notification of license renewal deadlines.

Minutes of the meeting will be in the March issue of QST.

The next meeting of the Board will be in Atlanta, Georgia July 9 and 10, 1987 immediately prior to the 1987 National Convention in Atlanta on July 11 and 12.

(ARRL Bulletin NR 6, Jan. 19, 1987)

WISCONSIN QSO PARTY
1800Z March 15 to 0100Z March 16
Rules and score sheet on pages 7 & 8

SPECIAL AD RATES FOR APRIL
ISSUE - SEE PAGE 11

Unusual Trivia Quiz - Page 5

Propagation Predictions - Page 10

Badger State Smoke Signals

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Subscriptions:

1 year	(12 issues)	\$7.50
2 years	(24 issues)	14.00
3 years	(36 issues)	\$20.00

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Swapfests and other Social Events

Saturday, March 7, 1987. Swapfest sponsored by W9HHX, Milwaukee School of Engineering Radio Club. 1121 N. Milwaukee St., Milwaukee, WI. 8:00 a.m. to 2:00 p.m. Admission \$2.00. Tables \$3.00. Limited table availability - reservations recommended, W9HHX Fest, P.O. Box 644, Room C-6, Milwaukee, WI 53201 Phone (414) 277-7251.

Saturday, March 14, 1987. The Fox Cities Amateur Radio Club "SWAPFEST '87" will be held at the Kaukauna High School, in Kaukauna WI. Tables are available at \$5.00 each. Send SASE c/o Don Baker, NB9J, 621 W. 7th St., Kaukauna WI 54130, phone (414) 766-3886. Admission is \$1.00. Coffee, donuts, beverages, food available on the site. Talk-in 16/76. Doors open at 6 a.m. for sellers and 7 a.m. for others. Directions: Exit Hwy 41 to Hwy 55 south to Main Street. Testing available, contact Larry Siebers, KD9IA, c/o 7077 Weyers Road, Freedom WI 54130, phone (414) 788-3823. Walk-ins accepted. Original license and a copy of license as well as photo ID required. Bring the Mr. or Mrs. as there is shopping nearby in the 101 store Fox River Mall, Northland Mall, Valleyfair Mall, and the new downtown Appleton Mall.

1800Z March 15, 1987 to 0100Z March 16, 1987. The Wisconsin QSO Party sponsored by the West Allis Radio Amateur Club. Full rules are elsewhere in this issue of BSSS.

Sunday, March 22, 1987. Tri-County Amateur Radio Clubs Hamfest at the Jefferson County Fairgrounds in Jefferson, WI. The Tri-County ARC provides a scholarship from the proceeds of this

hamfest. The flyers passed out at Grayslake in Sept. were dated wrong. The above date is the correct one. Amateur Radio Exams. (see Testpoint for contact details.) Army and Air Force MARS meetings. Food and Refreshments. Admission: \$2.50 in advance or \$3.00 at the door. 6 ft. tables: \$3.00 in advance or \$4.00 at the door. Doors open at 7 a.m. for sellers only. SASE to Bob Barker, 724 Burdick, Milton, WI 53563.

Sunday, April 5, 1987. The annual Madison Swapfest sponsored by the Madison Area Repeater Association will be held in the Dane County Expo Center in Madison, WI. Doors open at 8:00 a.m. Electronic equipment and components, for hams computer hobbyists & experimenters. All you can eat pancake breakfast. Beef bar-b-ques - hot dogs. Admission \$2.50 in advance or \$3.00 at the door. Tables \$5.00 in advance or \$6.00 at the door. Table reservations do not include admission price, you must buy a separate admission ticket. Reserve your tables early as they sell out every year. We urge you to carpool as the county charges a parking fee. For advance reservation or information on exhibitor booths contact: MARA, Box 3403, Madison, WI 53704. See the ad in February BSSS and support this Badger State Booster.

Saturday, May 2, 1987. Ozaukee Radio Club's Swapfest in Cedarburg, WI. Contact O.R.C. Swapfest Committee, 101 East Clay St., Saukville, WI 53080.

Saturday, July 18, 1987. South Milwaukee Amateur Radio Club's Swapfest "87" in Oak Creek, WI.

Sunday, October 25, 1987. Kettle Moraine Radio Amateurs Ham, Computer, and Video Fest at Waukesha, WI. Contact: KMRA, 313 Hillview Circle, Waukesha, WI 53188

Club Meetings

BADGER AMATEUR RADIO SOCIETY (W9YT - UNIVERSITY OF WISCONSIN - MADISON)

Regular monthly meetings are held at 7:30 PM on the 2nd Wednesday of every month while school is in session, in B314 Electrical Engineering Building.

CENTRAL WISCONSIN RADIO AMATEURS, LTD. (STEVENS POINT)

Regular club meetings are held on the second Wednesday of the month.

CENTRAL WISCONSIN REPEATER ASSN. (28/88 BARABOO)

The annual meeting will be March 14, 1987 at CJ's restaurant on Atlas Ave., just off Cottage Grove Road in Madison, WI. 6:30 pm for cocktails and dinner at 7:30 pm.

EAU CLAIRE A.R.C.

The Eau Claire Amateur Radio Club meets on the second Tuesday of the month at the Parks and Recreation Building at Oxford and First Streets in Eau Claire. Meeting time is 7:30 P.M. Hams and guests are welcome. Travelers in the area are invited to use the club's wide-area repeater K9UXP on 146.31/91.

FOUR LAKES A.R.C. (MADISON, WI)

RED CROSS BUILDING, 4860 Sheboygan Ave, Madison, WI., first and third Tuesday each month.

FOX CITIES AMATEUR RADIO CLUB

Regular meetings at 7 pm, the third Monday of the month at Roosevelt Jr. High School, 318 E. Brewster St., Appleton, WI. 424-735-6294 for information.

GREEN BAY MIKE & KEY CLUB

The Green Bay Mike & Key club meets the 2nd Thursday of each month at the American Red Cross Bldg., corner of Danz and Deckner in Green Bay. The annual banquet will be March 21, 1987.

GREEN FOX AMATEUR RADIO CLUB

Meetings are held the third Monday of the month at 7:30 p.m. at the Green Lake Town Hall located at the intersection of county highways K and N.

KETTLE MORaine RADIO AMATEURS

All meetings are held on the SECOND (2nd) Friday of each month.

MANITOWOC COUNTY RADIO AMATEURS

First Wednesday; 7 p.m. at City Hall, 817 Franklin St, Manitowoc, WI.

Second Wednesday; Red Cross Building, 1816 Washington St., Manitowoc, WI.

MILWAUKEE RADIO AMATEURS CLUB

All regular meetings of MRAC scheduled at the Wauwatosa Savings and Loan Building, 7500 West State Street, will be held on the second Thursday of the month.

OZAUKEE RADIO CLUB

Meetings held every second Wednesday at 7:30 p.m. in the Saukville Community Center

RIVERLAND AMATEUR RADIO CLUB

Regular meetings are held at 7:30 P.M., on the first Tuesday of each month in the Onalaska Community Center in Onalaska, WI.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB

Regular club meetings are held on the Second Tuesday of each month, at 7:00 P.M. at the Sheboygan Red Cross/Boy Scout building located at 2032 Erie Ave. in Sheboygan.

SOUTH MILWAUKEE AMATEUR RADIO CLUB

Meetings held at Legion Post 434, Shepard Ave., Oak Creek, on first Wednesday of the month. Auctions held at March and October meetings.

WEST ALLIS RADIO AMATEURS CLUB

Regular meetings are held on the second Tuesday of each month at St. Francis Savings, 9330 W. Greenfield Ave., at 8:00 P.M.

THE WISCONSIN VALLEY RADIO ASSOCIATION, WAUSAU

Holds regular monthly meetings on the first Tuesday of the month at 7:30 p.m. The location varies, but information is available on the 146.04/64 repeater in Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO, WI)

All regular meetings of YTARC are at the Baraboo Civic Center. Meetings start at 7:30 P.M. Monday meetings are held in room 20. All others in Room 25.

Meetings dates for 1987 are: Wednesday, Mar. 18; Thursday, Apr. 16; Monday, May 18; Tuesday, June 16; Wednesday, July 15; Thursday, August 13; Monday, September 14; Tuesday, October, 13; Wednesday, November 11; and Thursday, December 10.

Let us know of your club meeting dates, and we will let others know of your meetings and activities. There may be Amateurs in your area interested in joining your club, or members of other clubs interested in making an interclub visit.

The TEST POINT



The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

March 14, 1987	Kaukauna, WI
March 21, 1987	St. Paul, MN
March 22, 1987	Tri-County Swapfest Jefferson, WI
April 4, 1987	Milwaukee, WI
April 18, 1987	Waukesha, WI
April 18, 1987	Minneapolis, MN
May 16, 1987	Waukesha, WI
May 16, 1987	Robbinsdale, MN
June 6, 1987	St. Paul, MN
June 21, 1987	Stevens Point, WI
June 27, 1987	Waukesha, WI
July 18, 1987	Minneapolis, MN
August 9, 1987	St. Cloud, MN
August 29, 1987	Annandale, MN (Robbinsdale ARC)
September 19, 1987	St. Paul, MN
September 26, 1987	Wisconsin Rapids, WI
October 17, 1987	Minneapolis, MN
November 7, 1987	Richfield, MN (Robbinsdale ARC)
December 5, 1987	Stevens Point, WI
December 19, 1987	St. Paul, MN
Monthly, First Sat.	Racine, WI
Monthly, Third Sat.	Loves Park, IL

General rules for all examinations:

All examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs may permit walkins. Check with sponsor to find out if they allow walkins.)

To register for these examinations, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from the FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 22¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group. Remember-- you must file at least 30 days in advance unless otherwise indicated.

ARRL/VEC examinations require a check for \$4.35 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. As in the past, a copy of your license must be attached to your FCC form 610.

Additional information is given below.

MILWAUKEE METRO AREA TEST TEAM - MRAC/VEC

Saturday, April 4, 1987 - 9:00 a.m. Room 256, Wauwatosa East High School at 74th and Milwaukee Avenue - use the east (74th Street) entrance. Note: 74th Street is a one-way south street.

Bring your original license and a good photocopy, a pen, and \$4.25 for the exam fee. Walkins accommodated if time permits.

Register in advance on a Postal Service 14 cent postcard; print the grade of license you are applying for, your name, address, and telephone number. Send to:

The Milwaukee Radio Amateurs' Club, Inc.
N50 W16328 Pin Oak Court
Menomonee Falls WI 53051.

MILWAUKEE VOLUNTEER CORE GROUP - De Vry VEC

The MVCG will be giving Amateur Radio examinations as follows:

March 22, 1987 - At Tri-County Swapfest in Jefferson, Wisconsin.

The following exam sessions will be held in rooms S0207 and S0225 at the Waukesha County Technical Institute:

April 18, 1987
May 16, 1987
June 27, 1987

Walkins are welcome at all exam sites. Free coffee served only at WCTI. Exams begin at 9:00 a.m. at all sites. Novice through Extra Class exams will be given. Please bring your current license (if any) as the examiners are required to look at it.

If you are interested and wish to register for an exam, please send a post card with your name, address, phone number, date of the test session, and exams you wish to be tested for. Send the card to Syl Janczak, WD9JKZ, 3127A West Madison, Milwaukee WI 53215.

Exams for shutins are given by appointment only.

March 14, 1987, Kaukauna, WI
Fox Cities ARC Swapfest
Contact: Larry Siebers, KD9IA
7077 Weyers RD,
Freedom, WI 54130
414-788-3823

WISCONSIN RAPIDS, WI - VOCATIONAL SCHOOL
Contact: Gene Santoski, K9UTQ
1220 18th ST., So.
Wisconsin Rapids, WI 54494
(715) 423-6368

STEVENS POINT, WI - BLUE TOP INN
Contact: Joe Larson, N9JW
644 Portage St.
Stevens Point, WI 54481
(715) 344-1182

TOMAH, WI - VA BUILDING

Contact: Bill Bastian, N9BOE
206 E. Logan St.
Tomah, WI 54660
(608) 372-7293

RACINE, WISCONSIN - ARRL/VEC

First Saturday of each month except during summer and the Christmas holidays.

Exams are given at the Red Cross Building, 4521 Taylor Avenue, Racine WI 53405.

Bring your original license and a photocopy of it; also bring some form of photo identification, such as a Wisconsin photo driver's license, and a check for \$4.35 payable to ARRL/VEC.

Pre-registration at least 40 days before the test is desired, but walkins are permitted and will be accommodated until the extra supply of exams is exhausted.

Send pre-registration to: William R. Firchol, Jr., N9DMP, 1912 27th Street, Kenosha WI 53140.

Third Saturday of every month.

Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban Library on North Second Street in Loves Park, IL.

Contact: Gene Melton, AK9N
124 S. Chicago Ave. #2
Rockford, IL
(815) 229-7249

Minnesota tests - contact information:

Gopher/Minneapolis ARC:	Robbinsdale ARC:
Avery Finn, KØHLA	Ron Schaultz, NAØU
P.O. Box 53	6308 Peacedale Ave.
Hopkins, MN 55343	Edina, MN 55424
(612) 448-5384	(612) 920-7473

St. Paul ARC:	St. Cloud ARC:
Jay Bellows, KØQBE	P.O. Box 141
997 Portland Ave.	St. Cloud, MN 56302
St. Paul, MN 55104	Leonard E. Carlson
(612) 222-7253	(612) 252-0414

LOCATIONS:

University of Minnesota Moos Hall, Washington and Union Streets, Minneapolis.

Medina Ballroom, Midwinter Madness Hamfest, Medina, Minnesota.

St. Luke's School, 1005 Summit Ave., St. Paul, Minnesota.

North Memorial Medical Center, 3300 Oakdale Ave. N., Robbinsdale, Minnesota.

Minnesota State Fairgrounds, Amateur Fair '87 Hamfest, St. Paul, Minnesota.

St. Cloud, Minn., Annual Hamfest.

Handi-Hams Camp Courage, Annandale, Minnesota.

Richfield, Minnesota, Hamfest Minnesota and Computer Expo.

(ed note.) Thanks to Marv Mahre, WØMGI for the Minnesota information. If you are interested in any of the Minnesota tests, we suggest that you save the above information as we may not be able to have the complete list in every issue of Smoke Signals

The TEST POINT section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules.

Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN or K9ZZ at the address shown on page 2.

MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS
Oh what the heck -- items of interest:

Four Lakes Amateur Radio Club
THE FEEDLINE

1987 officers for FLARC are: President, Ken Trachte N9ADN; Vice President, John Offerdahl, KC9XH; Secretary, Frank Holliday, WB9NOV, and Treasurer, Don Liedel, WB9QX. Directors are: Jim Petterson, KC9GO; John Hicks, KA9KYB, and Richard Burton, N9ABF.

Fox Cities ARC (Appleton)
FC-ARC QSO'ER

The new EC for Outagamie County, Dave Chroninger, WB9GBG, introduced himself to the club and presented info on the emergency siren testing. Dave took over the duties from Jerry, N9AYN. The assistant ECs are: Dan De Groot, N9DGW, and Don, NB9J

Kettle Moraine Radio Association
KETTLE DRUMS

Congratulations to George Blair, K9VGE, on becoming the first Wisconsin recipient of VUCC on 3.2 MHz. It is interesting to note that of the last 10 VUCC awards in this area, 8 have gone to KMRA members! And, no one is letting up yet. Tom Steckbauer, KA9SPD, is a couple of grids away from VUCC on both 2 meters and 70 cm, to add to his 6 meter award.

Rock River Radio Club
NEWSLETTER

1987 Officers for RRRC are: President, Dale Marks, WB9ADB; Vice President, Duane Haas, W9BCU; Secretary, Beryl Pedersen, KA9BAC; Treasurer, Arnie Zietlow, KA9FNE, and Program Director, Al Johnson, WB9FMU.

Taylor County Area Amateur Radio Club
Taylor County ARES

Congratulations to Scott Braun, KA9WDD, a Colby High School senior, who has been named the winner of the DAR Good Citizen Award for Colby High School.

Congratulations to Scott Young, N9FZS, a Colby High School senior, who was recently inducted into the Colby High School chapter of the National Honor Society.

Our thanks to the above mentioned clubs and their bulletins for the information presented. Badger State Smoke Signals will be pleased to exchange bulletins and information with your club. Please contact K9ZZ or K9EN.

Dale, K9---, was on a powdered food diet until he got caught in the rain and gained 75 pounds.

Yellow Thunder Amateur Radio Club

K9ODK
WB9FDZ

The January 16, 1987 meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order by the new President, Steve Schwoegler, WB9RNL at 7:32 p.m.

Members present were:

Harry Westlund, K9EHJ	Baraboo
Harry Mayland, K9FFT	Baraboo
Jim Decker, WB9UQT	Baraboo
Steve Schwoegler, WB9RNL	Wisconsin Dells
Art Kleefisch, W9WSS	Baraboo
Bill Klinkner	Sauk City
Ken Ebner, K9EN	Portage
Jim Romelfanger, K9ZZ	Baraboo

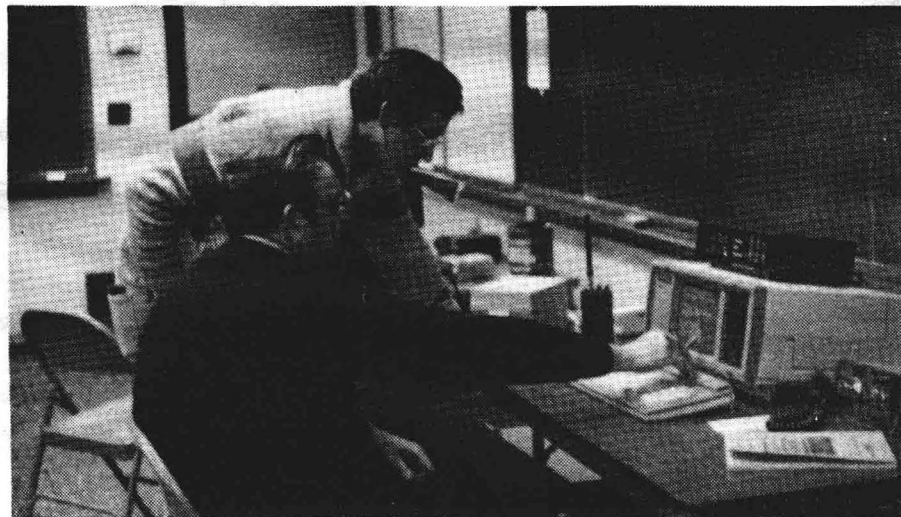
The minutes of the previous meeting, as published in the Badger State Smoke Signals, were approved. Jim Decker, Treasurer, then read his financial report which was accepted and several bills were approved for payment.

Under Old Business, a lengthy discussion was held regarding Novice classes for this year. The program finally agreed upon is as follows:

Feb. 5, 1987 - An open house session for the general public and prospective novices to be held in room 29 at the Baraboo Civic Center, and will start at 7:30 p.m. There will be demonstration of 2-meter fm, packet radio, HF Phone and CW with displays of appropriate equipment.

Feb. 19, 1987 - Novice instruction classes begin. Sessions will be conducted in room 29 at the Baraboo Civic Center and will begin at 7:00 p.m. and will run for 12 weeks.

A status report was given on the progress of running a special event station this year at the Circus World Museum. It was agreed that Art Kleefisch and Harry Westlund would arrange a meeting with the proper individuals at Circus World Museum and attempt to finalize the date, time and location.



Shown above is Ken Ebner, K9EN demonstrating packet radio to a prospective new ham.

No new business or discussion.

Ken Ebner announced a couple of upcoming Hamfests: Wheaton (Ill.) Hamfest - Feb. 1, 1987 at Villa Park, IL. and the Iri County Amateur Radio Hamfest, March 22 1987, Jefferson county Fairgrounds.

Art Kleefisch presented a short talk and demonstration of his assortment of hand-held calculators. His latest acquisition is a Radio Shack PC-5, a pocket calculator-computer with L.C.D. readout and 4k ram. (Just what I need to pass the F.C.C. test.)

Winning name in the Buck Nite drawing was O.F. Warning, W9OXN, who was not here. Hence, next meetings drawing will be for \$6.00.

The program for the next meeting will consist of a demonstration in the use of an IFR1200S Service Monitor. Members are urged to bring their rigs to be tested. No rigs - no demonstration. Besides it's free.

With no further business the meeting was adjourned at 9:35 p.m.

Respectfully submitted, Harry Westlund, K9EHJ

The March meeting of the Yellow Thunder Amateur Radio Club will be held in room 25 of the Baraboo Civic center on Wednesday March 18, 1987.

The program will be conducted by Ken Ebner, K9EN, and will include an oscilloscope demonstration. He will bring a couple of scopes along, and how to measure waveforms, period, frequency, a.c. peak-to-peak and d.c. voltages using a oscilloscope will be shown. He will also bring a logic demonstration and show various types of logic circuits.

The YTARC meetings are open to all persons interested in Amateur Radio. You do not have to be a club member to attend.

YTARC BIRTHDAY:

Art Escher	WA9WUS	March	12
Fred Becker	W9KKM	March	17

SENTENCE SERMON

The most important thought I ever had was that of my individual responsibility to God.

--Daniel Webster

YTARC DEMONSTRATES

The February 5, 1987 Baraboo Civic Center open house demonstration of Amateur Radio was a success with several prospective Hams indicating an interest in upcoming YTARC classes starting Feb. 19th at the Civic Center. Demonstrations included HF phone and cw, 2-meter VHF and repeaters, packet radio, code practice equipment, and books and pamphlets on Amateur Radio.

Unusual Trivia Quiz

Gene Santoski, K9UTQ
1220 18th Avenue South
Wisconsin Rapids WI 54494

Here are the trivia questions for this month:

1. Where are Amateur license applications processed by the FCC?
2. What type antenna are all others compared to with respect to gain figures?
3. What letter designator is used for the bottom layer of the ionosphere during daylight hours?
4. How many ARRL Sections are there?
5. What type of antenna was first used at ARRL Headquarters station W1AW?
6. What do the letters AMTOR represent?
7. How many IARU regions are there?
8. On a transceiver, which control allows you to vary the receive frequency while keeping the transmit frequency fixed?
9. What was the model of the first Collins mobile transceiver?
10. What is the national calling frequency on the 6 meter band?

Only one person responded to last month's questions! Send your answers to K9UTQ, address above!

TEEPEE WALL PAPER

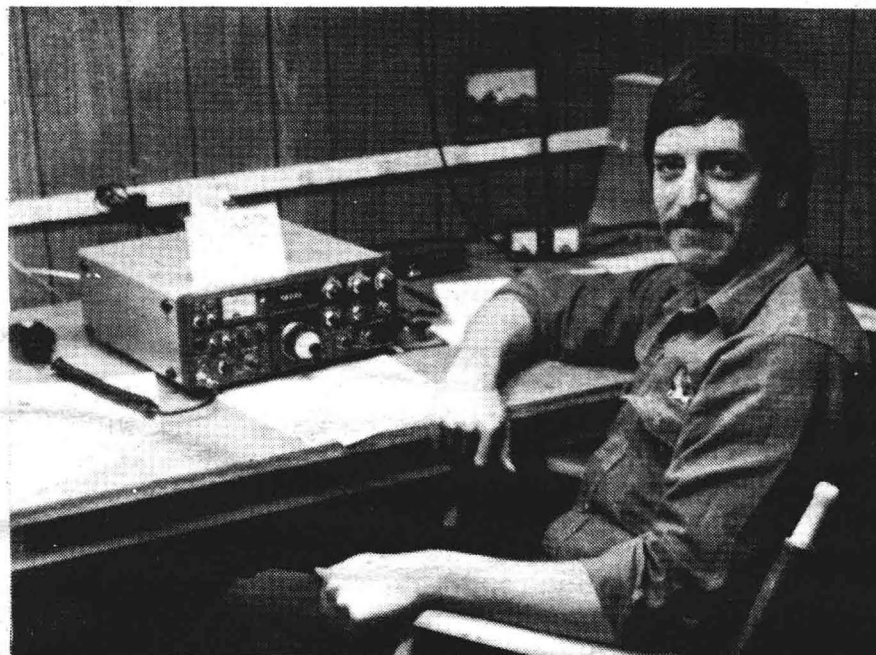


BADGER STATE SMOKE SIGNALS

HAMCANDID

This feller looking at the camera is Dave Rece, NO9M, who lives near Stoughton, Wisconsin. Dave held the call WA4VHQ when he was about 10 years old and living in Kentucky, but he never had a QSO with that call (but he did come close - once.) In January of 1986, he rejoined us as KA9UPY, changing to NO9M when he got his Extra. Dave works mostly 40 and 160 meters, and once in a while he finds his way to 2 meters.

K9ZZ photo



WISCONSIN CHAPTER 55

John La Blonde, W9FZC, State Chairman
301 Westlawn Avenue
Elkhorn WI 53121-1225

The winter edition of the QCWA NEWS has just come off the press at Irving, Texas, and has a few items of interest to the Wisconsin Amateur community.

In the recent election of officers, the following were elected in the Wisconsin Chapter 55 of QCWA:

State Chairman - John La Blonde, W9FZC
Vice Chairman - Harold Ferguson, W9IEM
Secretary - Lester Peterson, W9YCV
Treasurer - Richard Regent, K9GDF

Eight new members have joined the Wisconsin Chapter of the QCWA in the past few months. They are: Fred Wendt, W9ZAG; Joel Eschmann, K9MLD; Loren Ashwood, W9DH; James Breszee, K9VSO; Victor Hoffman, W9IDG; Harvey Nelson, N9FHO; R. N. Jensen, W0WLN; and Robert Barker, K9RIJ.

The Wisconsin Chapter of QCWA meets every Sunday morning at 8:30 a.m. local time on 3985 KHz, and everyone is invited to participate.

We have a luncheon meeting twice a year on the first Saturday of June and October, with the luncheon meetings varying in locations around the state. They are always at noon to make it easier to drive to and easier to return home while in the daylight hours. We would be happy to have you join us.

FCC ASKS FOR CALL SIGN COMMENTS

Acting in response to requests of ARRL and three others, FCC has issued a request for comments on a proposal inquiring if call signs could be issued by the private sector.

FCC would only issue one 2 X 3 call sign for each new licensee, regardless of license class. This would be from the prefix block NA through NZ. FCC would then discontinue processing requests for any call sign changes.

All other call signs would then be available to a special call sign coordinator or SCSC who could assign one or more supplemental call signs at the request of the licensee.

A special call sign could be used in lieu of the FCC assigned call sign during station ID required by 97.84.

An SCSC would be operated on a not for profit basis but would be allowed to recover administrative costs.

The preliminary view of the FCC is that having one SCSC would be a more efficient system in preventing the same call sign from being assigned to different stations and avoiding inconsistencies of assignment. Further, a single SCSC would minimize the number of points of contact between the SCSC and the FCC.

Written comments on this proposal, numbered PRB 3, are due on or before April 23, 1987, with reply comments filed on or before May 22.

(ARRL Bulletin NR 11, Feb 3, 1987)

MODERN TECHNOLOGY: An American company announces an invention; the Russians claim they made the same discovery 20 years ago; the Japanese start exporting it.

The farmer's barn had just gone up in smoke, and his insurance agent was explaining why he couldn't collect cash for it. "Read your policy," he insisted. "All our company engages to do is build you another barn exactly like the one that's destroyed." "Well, if that's the way you fellows do business," raged the farmer, "you can cancel the policy on my wife."



On February 3, 1987, at 7:30 p.m., the regular meeting of the Riverland Amateur Radio Club was called to order by President Gary Webb. Minutes of the January meeting were read from the Badger State Smoke Signals.

37/97 REPORT

The repeater is ten years old and is technically obsolete equipment and is easily interfered with. We should consider replacement over a period of time. Committee was formed consisting of Van WA9FIO, Ron KD9OY, Dan AI9D and Walt WD9GCR. They will look into costs and types of equipment available and give us a report near the end of the year.

OLD BUSINESS

Craig Goldbeck N9ETD reported on prices and logos for lined and unlined jackets. Unlined jackets and logos can be purchased for \$18.50 each, and lined jackets and logos will go for \$25.45. Craig also held a discussion regarding a possible local Ham-fest. Some of the questions mentioned were relative to time of the year, location and or the possibility of expanding or remaining about the same size as in the past. A committee consisting of Gary N19V, Bill WB9VYI, Charlie KA9UUK, and Dick KØJYB to look into the matter (was appointed).

NEW BUSINESS

Dick KØJYB reported that on May 1, 2, and 3, 1987, the area radio stations are planning a display at the Valley View Mall to recognize National Radio Month. RARC has been invited to participate. Dick KØJYB and Charlie KA9UUV have already contacted the Director of Marketing and the head of Maintenance to reserve a space for RARC and investigating the possibility of erecting an HF antenna on top of the mall. A volunteer group will man the station for three days. A sign up sheet was also passed around asking for future program suggestions.

The meeting was adjourned at 8:05 p.m.

Total members present was 23.

Respectfully submitted: Dick Low KØJYB

MEMBERS PRESENT

Dick Low

KØJYB

Al Reinholz
Charlie Burch
Wid Johnson
John Young
Karl Olberg
Bill Winder
Herman Ludvik
Jack Yashizumi
Gary Countryman
Craig Goldbeck
Greg A. Miller
Al Hoffman
Rick Williams
Bob Kathan
Feroz Ghouse
Jim Brooker
Dan McKenzie
Bill Wood
Ron Reed
Walter Altus
Duane Fruechte
Van Elston

N9FZE
KA9UUK
W9DM
W9KAZ
W4ST
K9EGQ
W9HJV
W9KTD
KD9RL
N9ETD
KA9FOZ
KA9VWW
KV9U

N9FJL
N9DBK
AI9D
WB9VYI
KD9OY
WD9GCR
W9HWQ
WA9FIO

GUESTS PRESENT

Maty Johnson

Dean Ott

GREMLINS!!

When we goof, we goof! A few rather disgusting gremlins found their way into an item we reprinted last month in the "Items of Interest" section on page 15 from The Feedline, the newsletter of the Four Lakes Amateur Radio Club of Madison (N9BAF is its very capable editor). Out, darn gremlins; here's the item.. again.. and we hope it's without errors this time:

Art, W9ZM, is the first non-YASME member to receive the "YASME Award." This very distinctive award is not that easy to get. It's sixty contacts and their confirmation in order to qualify for it. DXCC with 100 QSLs is easier to obtain. The contacts for this award must be from a YASME DXpedition, so it would take quite a few years to get enough contacts. Congratulations, Art, you deserve it, and it is another first for a Madison area DXer!

YELLOW THUNDER HOLDS OPEN HOUSE



The Baraboo area Yellow Thunder Amateur Radio Club held an Open House in February to acquaint the public with Amateur Radio. The Open House was a prelude to a Novice class series, which just got underway. Here, club president Steve Schwoegler, WB9RNL, of Wisconsin Dells, explains an HF rig to two interested Baraboo young folk. K9ZZ photo.

CONDOLENCES

We extend our sympathy to Badger State Smoke Signals Treasurer Jim Decker, WB9UQT, on the recent death of his father.

Our sympathy also goes to Steve Polishinski, WB9YSD, Verona, on the recent death of his grandmother.

Your subscription to Badger State Smoke Signals would be appreciated.



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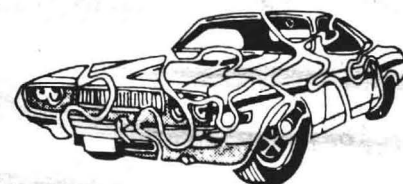
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HAM INSTRUCTORS

The ARRL's Club Services Department has a computer data base of Amateur Radio courses, as well as currently active instructors, and they would like to hear from those throughout the nation who offer any form of Ham Radio instruction.

Information on your service will be added to the League's data base so when inquiries are made by prospective Hams looking for instruction, they will be provided the latest information on what courses are available in their areas.

The data base covers Novice through Extra, and all grades in between. Send your information to the Club Services Department, ARRL Headquarters, 225 Main St., Newington CT 06111. (From the Westlink Report)

BEACON

Hawaii now has an experimental beacon on 1750 meters.

Operating on 183.39 KHz with a power input of 1 watt, the transmitter is located on the east coast of the Big Island. The beacon lies about 1/4 wavelength from the Pacific Ocean, with horizon toward all of North and South America.

The unit has been in 24 hour service since September 22, and sends the identifier "HO" in A1 mode. It is solar powered with a backup battery system for night time operation using an NI6E version of a Pinto modulator-transmitter.

QSN reports should be sent to NI6E/KH6, 667 Wainaku Ave., Hilo HI 96720. Tnx BIARC Bulletin. (From The Westlink Report)

LATE NEWS/JUST IN

FCC reports that they are ten weeks behind in the issuing of licenses at Gettysburg. PATIENCE IS A VIRTUE! (Thanks Milwaukee Radio Amateurs' Club Hamateur Chatter)

1987 Wisconsin QSO Party

This annual event, which has become one of the nation's most popular, is sponsored by the West Allis Radio Amateur Club, and will be held from 1800Z March 15 until 0100Z March 16, 1987. The rules are below, and if you turn the page, you'll find a score summary sheet. You can clip it and use it for your entry.. you ARE going to take

part, aren't you?? Remember, if you take part, and in the process you have some good pictures taken of you and your station in action (including those multi-county mobile efforts), we'd be more than happy to publish them. Send them to K9ZZ; the address is on page 2.

--K9ZZ

WISCONSIN QSO PARTY RULES

- DATE/TIME:** 1800Z MARCH 15 - 0100Z MARCH 16, 1987.
- MODES:** CW and Phone. All stations may be worked once per mode on each band. In addition, mobiles may be worked once per mode per county that they operate from. No Repeater QSOs Allowed.
- CLASSIFICATION:** Single Operator - Single Transmitter
Multi Operator - Single Transmitter
Multi Operator - Multi Transmitter
Single Operator Novice/Technician
- EXCHANGE:** Wisconsin stations send RS/T and county.
Non-Wisconsin stations send RS/T and state/province.
- FREQUENCIES:** CW: 3550, 3725, 7050, 7125, 14050, 21150 (Other bands may be used).
(Suggested) Phone: 3890, 7290, 14290.
- SCORING:** Phone contacts count 1 QSO point; CW contacts count 2 QSO points.
WISCONSIN STATIONS: Multiply the sum of QSO points by the sum of Wisconsin counties (max 72), plus states (max 50) plus provinces (max 13).
Note: DX countries count for QSO points but not as multipliers.
NON-WISCONSIN STATIONS: Multiply the sum of QSO points by the number of Wisconsin counties (maximum 72).
- BONUS:** WISCONSIN MOBILES/PORTABLES: Add 500 bonus points for each county that you operate from, outside your home county, with a minimum of 15 QSOs per county to qualify.
- LOGS:** Entries must contain a log consisting of: Time (GMT), call, RS/T, state/province, Wisconsin county, mode and a complete Score Summary including your name, address and call. Circle new multipliers as worked. Logs containing more than 100 QSOs must be accompanied by a dupe sheet (separate dupe sheet for each mode).
Mobile entries must indicate county changes in log and submit a separate dupe sheet for each county.
Entries must be postmarked by April 15, 1987 and sent to:

WISCONSIN QSO PARTY
WEST ALLIS RADIO AMATEUR CLUB
P. O. BOX 1072
MILWAUKEE, WI 53201

- AWARDS:** **NON-WISCONSIN:** Awards will be presented to the highest single operator score in each state/province.
WISCONSIN: Awards will be presented to the following:
- 10 highest single operator entries
 - Highest multi-operator single-transmitter entry
 - Highest multi-operator multi-transmitter entry
 - Highest Novice/Technician entry
 - Highest aggregate club score (club member stations to be located within 50 miles of the club except for mobiles).

WISCONSIN COUNTIES				STATES			PROVINCES
ADAMS	FLORENCE	MARATHON	RUSK	ALABAMA	LOUISIANA	OHIO	ALBERTA
ASHLAND	FOND DU LAC	MARINETTE	SAUK	ALASKA	MARYLAND (D.C.)	OKLAHOMA	BRITISH COLUMBIA
BARRON	FOREST	MARQUETTE	SAWYER	ARIZONA	MASSACHUSETTS	OREGON	LABRADOR
BAYFIELD	GRANT	MENOMINEE	SHAWANO	ARKANSAS	MAINE	PENNSYLVANIA	MANITOBA
BROWN	GREEN	MILWAUKEE	SHEBOYGAN	CALIFORNIA	MICHIGAN	RHODE ISLAND	NEW BRUNSWICK
BUFFALO	GREEN LAKE	MONROE	ST. CROIX	COLORADO	MINNESOTA	SOUTH CAROLINA	NEWFOUNDLAND
BURNETT	IOWA	OCONTO	TAYLOR	CONNECTICUT	MISSISSIPPI	SOUTH DAKOTA	NORTHWEST TERRITORIES
CALUMET	IRON	ONEIDA	TREMPEALEAU	DELAWARE	MISSOURI	TENNESSEE	NOVA SCOTIA
CHIPPewa	JACKSON	OUTAGAMIE	VERNON	FLORIDA	MONTANA	TEXAS	ONTARIO
CLARK	JEFFERSON	OZAUKEE	VILAS	GEORGIA	NEBRASKA	UTAH	PRINCE EDWARD ISLAND
COLUMBIA	JUNEAU	PEPIN	WALWORTH	HAWAII	NEVADA	VERMONT	QUEBEC
CRAWFORD	KENOSHA	PIERCE	WASHBURN	IOWA	NEW HAMPSHIRE	VIRGINIA	SASKATCHEWAN
DANE	KEWAUKEE	POLK	WASHINGTON	IDAHO	NEW JERSEY	WASHINGTON	YUKON TERRITORY
DODGE	LA CROSSE	PORTAGE	WAUKESHA	ILLINOIS	NEW MEXICO	WEST VIRGINIA	
DOOR	LAFAYETTE	PRICE	WAUPACA	INDIANA	NEW YORK	WISCONSIN	
DOUGLAS	LANGLADE	RACINE	WAUSHARA	KANSAS	NORTH CAROLINA	WYOMING	
DUNN	LINCOLN	RICHLAND	WINNEBAGO	KENTUCKY	NORTH DAKOTA		
EAU CLAIRE	MANITOWOC	ROCK	WOOD				

LAKESIDE TOWER UPDATE

The well publicized Lakeside Park, Kentucky tower case (see page 8, Feb. 1987 BSSS) has taken a new twist with plaintiff John Thernes, WM4T, turning down a settlement because the city refuses to pay any of the very heavy court costs.

In an exclusive interview with Westlink

Report, WM4T said that on December 22, 1986, the community of Lakeside Park contacted his attorney offering the right to finally install a 65 foot high tower and antenna. John had originally requested a 70 foot antenna structure, but he had then decided to negotiate the antenna's height in order to "express our views in front of the judge that we wanted to get this settled and be reasonable. We offered a 65 foot settlement for the tower only which also included the 8 foot long mast sticking out the top to support Yagi antennas."

This offer had been made by Thernes earlier last year, but it was not until near year's end that the city began to capitulate. However, the city added a rider of its own to the proposed settlement. It said that it would not authorize the payment of any monetary sums and would only agree to the proposed tower "if it represents a full and final settlement of all matters."

After consulting with his lawyer, WM4T decided to reject that offer because of the large amount of money he and other hams who supported him had spent in justifying his right to erect an Amateur antenna installation. This, most of us believe, is guaranteed to holders of Amateur Radio licenses by issuance of the FCC's PRB-1 last year.

In a statement to the Amateur community after rejecting the city's offer, John said, "As many Amateurs know, a sizeable sum of money has been spent on this litigation. And, even though attorney's fees are not guaranteed by the courts, I figure that I would much rather have the judge tell me that I am not entitled to fees rather than to sign away my rights to the fees."

He said that as a result of this, he is not going to knuckle under and intends to proceed with the court hearing before the federal district judge for the Eastern District of Kentucky, adding, "...and again I appreciate all the support that all the Amateurs across the country have given to me.. Hopefully, we are just a few months away from a final decision from the judge, and if that decision is favorable, we will have an antenna up and possibly a very good piece of precedence that Amateurs will be able to use all across the country."

Even though this case now appears to be in the home stretch, there is still no guarantee that the judge will render a decision favorable to WM4T. Therefore it is still considered important to continue supporting the Northern Kentucky Tower Fund with donations. The address is P.O. Box 17721, Lakeside Park, KY 41017.

(Thanks The Westlink Report)

Reading someone else's copy of BSSS? We'd be happy to have YOU as a subscriber! Send in your sub today! --K9ZZ

1987 WISCONSIN QSO PARTY SCORE SUMMARY SHEET

Call _____ State _____ Home WI County _____

Name _____ Club Affiliation _____

Address _____ City _____ Zip _____

Entry class: single op ☐ multi-single ☐ multi-multi ☐ Novice/Tech ☐

mobile ☐ portable ☐

QSO INFORMATION (NO REPEATER QSOs)

BAND	CW	PHONE	Wisconsin counties operated from:	
80M	_____	_____	_____	_____
40M	_____	_____	_____	_____
20M	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
TOTAL QSOs >>>>	_____	_____	_____	_____

SCORING

QSO Points = CW Total QSOs plus CW Total QSOs plus Phone Total QSOs

_____ = _____ + _____ + _____

Multiplier = Wis. Counties (72 max) plus the sum of States & Provinces (63 max, WI ONLY)

_____ = _____ + _____

Raw Score = QSO Points times multiplier

_____ = _____ x _____

Final Score = Raw Score plus bonus points (WI Mobile operators only)

_____ = _____ + _____

I have read and followed the WISCONSIN QSO PARTY RULES to the best of my knowledge.
(All OPERATORS must sign.)

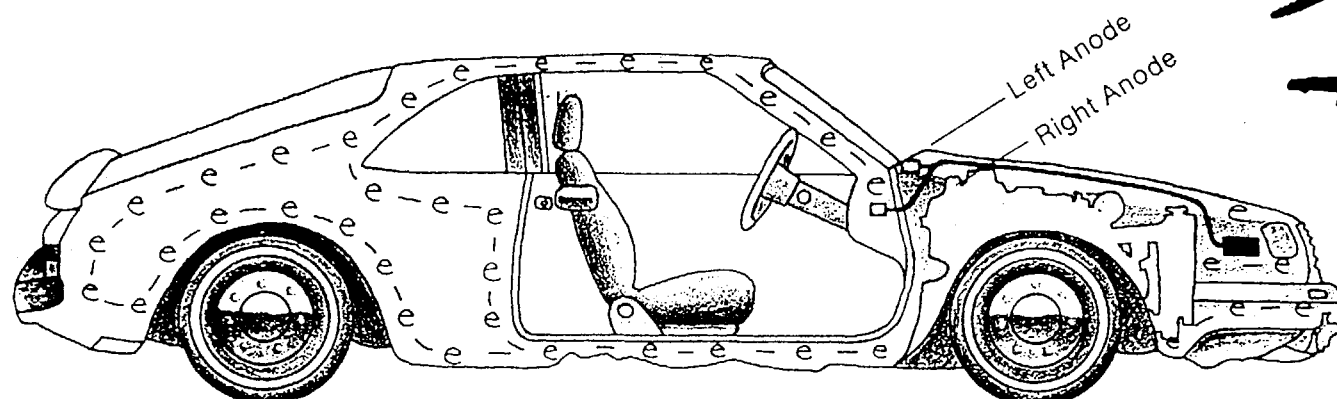
Signature(s) _____

Date _____

To qualify, entries must be postmarked by April 15, 1987. Send to: WISCONSIN QSO PARTY, WEST ALLIS RADIO AMATEUR CLUB, P. O. BOX 1072, MILWAUKEE, WI 53201. Entries may be disqualified if the QSO Party Rules are not followed. The decision of the Wisconsin QSO Party Rules Committee shall be final. To receive a copy of the official results, enclose a business size SASE with your entry.

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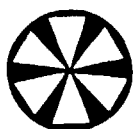
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(PHONE) _____

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NUCLEAR ELECTRICITY DECLARED DANGEROUS

(The GEARVAKf Bulletin, Winter 1986)

Nuclear-generated electricity has been declared "dangerous and hazardous to your health," according to a statement issued last week by the Southern Michigan Coalition Against Atoms.

The declaration came after it became known that appliances in the homes of residents in Bent-on-Harpoon and San Jose, Michigan, were severely damaged by the nearby Cuke Nuclear Power Plant.

According to Coalition spokesperson Midgley Mickle, "We been getting reports of elektric ovens totally melting down all over the place because they was hooked up

to nuc-u-ler electricity."

The incidents were thought to have begun just before Thanksgiving when a Bent-on-Harpoon woman reported seeing "this strange red glow from my built-into-the-wall oven that escalated into full-fledged shooting white fireworks" that melted down her oven.

The Coalition claims that radiation in the electricity was also blowing out Christmas tree lights, making microwave-baked potatoes too soft, messing up TVs during "Wheel of Fortune," and making some people sterile.

Cuke Power Plant spokesperson, Vermin Lurk, denied the Coalition's charges in a statement issued two days later. Said Lurk, "We deny the Coalition's charges."

GEARVAKf Scientific Studies Director, Dr. Avruell U. Harnishe, called the possible effect upon the Amateur Radio Service "obvious." He said that "any fool knows what the problem is" and would not explain further. --Mitz and WB7TGQ

For Your Information!

How do you judge an automotive value? Ask those in the industry and they will tell you that condition and appearance are paramount in the evaluation. If you are purchasing a new car, its value several years down the road is important either if you wish to keep the car or sell the car. So condition and appearance dictate the value of the car at any point beyond the day it was manufactured. A RustEvader and good maintenance will pay off by increasing the projected value of your car by reducing the rate of corrosion and retard rusting. The RustEvader was designed specifically to retard cosmetic corrosion. The normal microscopic pores in the paint are protected first. Small scratches, nicks and scars will not grow into ugly, scabby, cancerous body corrosion. It is hard to imagine that your new car is so vulnerable but just look at any car that is two or three years old and you can see the devastation that has already begun.

It is easy to understand how hidden corners, bends and shapes of sheet metal body parts are consumed by a hostile environment. Abrasions from sand, stone and salt and freezing and thawing of water activate microscopic corrosion sites and pores in the paint that rapidly advance into body panel failure. Even galvanized sections that have been welded or bent in the factory-forming process are open to attack.

In order for rust or corrosion to occur there must be three essential ingredients that interact: oxygen, metal and moisture, (H₂O). The metal provides the electrons to satisfy oxygen's craving for electrons. Moisture is needed to provide the pathway of electron transfer from iron to oxygen. The most common way of preventing automotive corrosion is to apply a barrier between oxygen and the metal. This is why we paint automobiles. The paint is a suitable barrier. When the metal loses paint or is incompletely painted corrosion begins and continues until all of the metal is converted to an oxide or rust. Extra barriers have been developed such as undercoatings, rustproofing and paint sealants; but they are effective only as long as they insulate the metal from oxygen and water. Paint, rustproofing and sealants are known as di-electrics (not permitting electron transfer). As long as these di-electrics are in place without any small breaks, cracks or crevices, nicks, scratches or stone chips, the automotive body has a fair chance of surviving the environment. However, in the real world, a constant attack is underway to break down these barriers. Once broken, the barriers permit the migration of electrons from iron over a moist pathway to oxygen--the result is rust and corrosion. This is a simplified explanation that gets infinitely more complex with the introduction of industrial pollutants naturally occurring substances, sea salt and road salt; however, the complexity is still as simple as the migration of electrons from the metal to some other substance. This migration or coupling of iron and oxygen can be interfered with by the addition of excessive electrons from a source other than the iron or metal. RustEvader provides this source of free electrons that pacify oxygen and interferes with the coupling of iron and oxygen in the rusting process.

Since automobiles are produced essentially totally coated with a di-electric barrier of paint and rustproofing, the need to protect breaks in these barriers is of significant importance. The RustEvader forces the impressed electrons to escape or exit at the very site

where the barrier has broken down or worn away. RustEvader only works where and when it is needed. This is accomplished by pumping excess electrons on to the car body creating a condenser effect (when the di-electric is essentially intact) between the car body and the RustEvader anodes. Electrons repel each other resulting in their desire to return to a more positive home (anodes and atmosphere). In their escape from the automotive body thru breaks or pores in the di-electric coatings, these impressed electrons interfere with the rusting process and retard the rusting at local corrosion sites. There are variables that effect this interfering process: the composition of the metal, the type and concentration of the electrolyte, temperature and humidity.

Generally speaking, increases in humidity and moisture increases the rate and quantity of electron escape. However, even when the relative humidity is very low electrons will freely escape into the atmosphere. The impressed electrons escape in two ways: by displacing other electrons and by direct individual movement. If a continuous electrolyte exists (such as complete submersion in salt water) between the breaks in the coating on the car body and anodes, displacing electrons will move from the negative car body to the positive anode. In this condition the greatest rust retardation effect will exist. RustEvader works best where and when it is needed most. Under mild conditions of low humidity breaks in the coating permit the escape of electrons at corrosion sites and because of the low humidity only small quantities of electrons are needed to interfere with the rusting process. Compromises had to be considered in the RustEvader design. Therefore, complete interference in the rusting process cannot always be expected but rust retardation is dramatically demonstrated.

Unibody construction and modern autobody panel design is extremely vulnerable to corrosion: therefore, they are naturally presented to the consumer for use in a totally coated (painted) form. RustEvader has been designed to assist in the careful maintenance program by retarding corrosion at breaks in the coating. The smaller the break, the more concentrated the RustEvader effect. Large abrasions (circles 6" across) get very little protection at their centers. Most of the protection is provided at the perimeter (interface) of the paint and the abrasion. Therefore components such as exhaust systems and suspension components, which are normally not coated, are not protected. Body panel abrasions are not normally neglected by their owners and are repainted (coated) soon after abraded, therefore, the RustEvader was designed to assist the owner who is conscious of careful maintenance.

You want your car to look good while you're driving it, when you are ready to sell or trade it and particularly if you decide to give the car a major overhaul. If you lease a car, you are responsible to maintain a certain cosmetic standard or pay a penalty.

RustEvader was designed for people who care about their car and understand the value of careful maintenance and effect on their pocketbook. RustEvader wants your car to last and maintain its maximum value. Best of all RustEvader is yours forever. It's protection you can keep and take with you when you sell your car.

Rust Evader

SWAGUR ENTERPRISES

J. S. GURSKE, PRES.

WIS. DIST. FOR RUST EVADER CORP.

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7240 HIGHWAY Y

LODI, WI 53555



PROPAGATION PREDICTIONS



BY *Woody Minar* K9EF

13508 Tabscott Drive, Chantilly, Va. 22021

"The traditional definition of solar minimum is the time of lowest smoothed sunspot number, derived by applying a 13-month smoothing filter to monthly average sunspot numbers." That is, an Observed number and the provisional smoothed (13-month running average) sunspot number is generally, but not always, lower than the observed number.

Several methods of estimating the time (date) of the sunspot minimum indicate that it may have occurred sometime in mid-1986. "Other evidence," says the NOAA, "indicates the absolute smoothed minimum will not be reached until (1987). Either instance is generally consistent with the bi-modal distribution of the lengths of past cycles. The smoothing filter applied to the sunspot data uses a window that extends (six) months before and after the month being computed.

"Other physical quantities vary more-or-less in phase with the solar cycle including the extreme ultraviolet (EUV) radiation of the sun, background solar radio microwave emission and geomagnetic activity. These quantities may reach their low a year or more before or after the smoothed sunspot minimum. However, the smoothed sunspot minimum is important as a timing marker used in several methods of predicting the size of the next solar cycle. Typically, the prediction is made in terms of the smoothed sunspot number which is then converted to other parameters of more direct interest."

The solar flux at 10.7 cm is used as a surrogate measure of the solar EUV flux for which there are no real-time measurements and no long-term, well-calibrated data base. So even though it is the EUV flux which physically tests the thermosphere, solar radio flux is the most common parameter, other than smoothed sunspot number, to be used in atmospheric density models for long range predictions. Since the radio observations began in 1947, only three solar minima have been observed.

Based on this, if the sunspot minimum occurred in mid-1986, then the cycle should peak in late 1989. If it occurs in 1987, then it should peak in late 1990. Both estimates are expected to peak for about one year in duration, with a smoothed sunspot number of 120. The 10.7 cm solar flux in Cycle 22 is expected to peak at about 150, which is slightly better than Cycle 20 (140), but significantly worse than Cycle 19 (230) and Cycle 21 (190).

Better than average days (those days for best DX and conditions): March 9-11, 23-25, April 5-8.

Worse than average days (those days to think about Spring): March 15-18, March 30-April 1, April 12-15.

Excerpts from SESC PRF 590, 23 Dec 86.

73, Woody

Eau Claire A.R.C.

NEXT MEETING

The next meeting of the Eau Claire Amateur Radio Club will be Tuesday, March 10 at the Eau Claire Parks and Rec. Building. Lunch Committee is Steve, KD9YO, and Liz, N9EQR.

FEBRUARY MEETING SUMMARY

The meeting was called to order at 7:30. The minutes were approved as read. There was no treasurer's report, the treasurer being absent.

OLD BUSINESS

Todd, N9EQP, Special Events Coordinator, reported that the Ski Race at the E. C. Country Club and the Ice Races on Lake Altoona were both cancelled due to weather. The Ice Races were rescheduled for Feb. 14 and 15. A sign up sheet for this was circulated as well as one for the Ski Jump on March 8.

Tommy, WA9WRM, reported that Regis H.S. wants a volunteer or volunteers to teach an introduction to Ham Radio in three 3-hour sessions on April 13, 14, and 15 as part of their "Interim Week". John, KA9RZL, volunteered to assist, stressing the value of a younger Ham's presence at such a class. Others expressed interest also.

Several volunteers participating in the Rehab Radio project at Sacred Heart Hospital reported on the progress of the project and explained that the value of the project to the patients is not always apparent to the listener. We continue to operate on 2 meters starting at 6:00 Wednesday evening and Hams statewide are urged to look for us (Murphy willing) on HF at 6:30 at about 3925.

NEW BUSINESS

Ron, WA9PAM, has agreed to take on the Hamfest this year, assisted by Steve KD9YO, Lane KD9OB, and Larry AI9N. The team headed by Carl, W9NW, will conduct VEC exams during the Hamfest which will be held July 10th and 11th. The building has been secured, a contract signed, a lottery license obtained, etc. TNT has agreed to put flyers in their shipments, and club members who see an opportunity for distributing flyers (at hamfests, other club meetings, etc.) should get copies from PAM. Ron discussed the broad outlines of how the Hamfest is shaping up - potential vendors, groups represented, refreshments, prizes, etc. - and sought club input on many matters through informal discussion as well as several formal motions.

A motion was passed setting aside \$500 for the Hamfest Committee to use for

present needs.

A motion was passed to set the cost of tickets at \$2 in advance and \$3 at the door with tables going for \$2 each to individuals wanting them.

A motion was passed authorizing an outlay of club funds not to exceed \$600 for prizes at the Hamfest. Paul, W0AIH, will investigate how to get the most value for this money. (Lisa, KA9RII, reported that the ARRL will provide approximately \$100 in prizes also. The ARRL logo will appear on flyers and tickets.)

ANNOUNCEMENTS

Meteorologist Dave Prueher will present a program on severe weather at our April meeting.

New call books have been purchased and are currently held by KA9VUE.

Carl, W9NW, announced that of 14 aspirants at the VEC exams on Jan. 17th 4 upgraded and 1 received credit for passing an element. The next session will be mid April with plans for 4 sessions per year, one at the July Hamfest. Carl also announced that the current Novice class numbers 3 with 1 more coming plus several Techs working on code speed. Carl's announcement that Novice Enhancement will probably take effect this summer prompted a brief discussion of the new privileges and the "grandfathering" of current license holders. Another change from the FCC is the issuing of certificates of completion for written elements irrespective of a person's status with regard to the code elements. This takes effect Feb. 13th and makes it possible (in theory) to get all the theory out of the way and then tackle the code elements. Certificates of completion will be valid for one year.

Several announcements from different sources indicated that 1) Amateur license plates will be a while in coming and 2) they will be red on white.

The Rochester, MN Amateur Radio Club - which meets one week after the Eau Claire club - has given us a list of their programs with an invitation to our members to attend any programs that interest them. See Paul, KA9LJK, for the list.

The meeting adjourned at 8:35 p.m.

Respectfully submitted,

Robin, NI9R - Secretary EARC

ADVERTISING INFORMATION

With our change to publication by offset printing, we can now accept display ads. The basic information is as follows:

AD SIZES

FULL PAGE: 10.5" wide and 13.0" high

HALF PAGE: 10.5 by 6.5 or 5.25 by 13.0

1/4 PAGE: 10.5 by 3.25 or 5.25 by 6.5

1/8 PAGE: 5.25 by 3.25

BUSINESS CARD: 3.5 by 2.0

AD RATES

FULL PAGE

\$60.00 (1 time)	\$54.00 (2X)	\$51.00 (3X)
\$48.00 (4X)	\$45.00 (6X)	\$42.00 (12X)

HALF PAGE

\$36.00 (1 time)	\$32.40 (2X)	\$30.60 (3X)
\$28.80 (4X)	\$27.00 (6X)	\$25.20 (12X)

QUARTER PAGE

\$20.00 (1 time)	\$18.00 (2X)	\$17.00 (3X)
\$16.00 (4X)	\$15.00 (6X)	\$14.00 (12X)

1/8 PAGE

\$12.00 (1 time)	\$10.80 (2X)	\$10.20 (3X)
\$9.60 (4X)	\$9.00 (6X)	\$8.40 (12X)

BUSINESS CARDS

\$5.35 (1 time)	\$4.82 (2X)	\$4.55 (3X)
\$4.28 (4X)	\$4.01 (6X)	\$3.75 (12X)

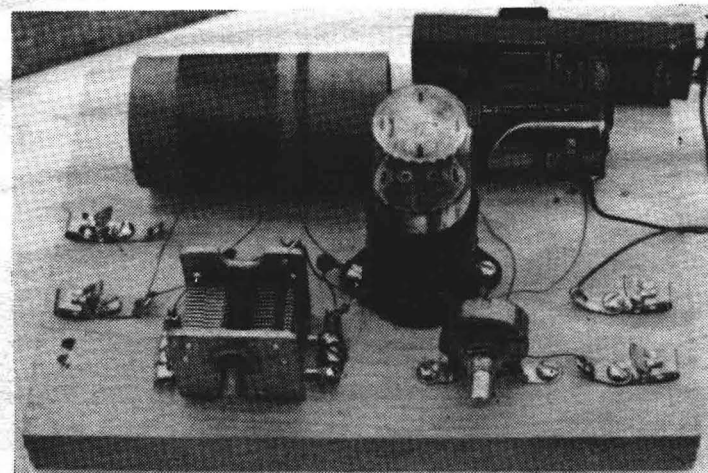
SPECIAL AD RATES! PLEASE READ!

NOTE!! In addition to our regular mailing, 1000 extra copies of BSSS will be handed out at the Madison Area Repeater Association Swapfest in Madison WI on April 5, 1987. Also, if you place an ad for that issue before April 1, you may take the 2X rate (that is 10% off the one-time rate.) Ad artwork or copy must arrive here before March 10, 1987.

These rates are based on camera-ready copy. For more information, contact Ken Ebnetter, K9EN, 822 Wauona Trail, Portage WI 53901, or call (608) 742-3560.

The nifty homebrew receiver in this photo was built by Carol, N9FVV, of Verona. It was built from a kit, and is a one tube (that's right - it has a tube - a 1G4GT!) regenerative receiver. When this photo was taken, it had a few bugs in it, but by this time, it's probably playing merrily away. Neat!

K9ZZ photo



Spotlights on Amateur News

By Richard R. Regent, K9GDF, Section Manager
5003 South 26th Street, Milwaukee WI 53221

New member services, such as timely notification of license renewal deadlines, are earmarked for more League dollars in 1987. Small growth in the number of Amateurs during 1986 is now a concern, but the suggestion to increase rebates for new members joining through clubs was scrapped. Future growth depends on recruiting Amateurs of all ages, keeping those we have and bolstering volunteer activities.

Headquarters WATS line idea dropped after a study determined use that would be for limited to incoming calls from prospective Hams and from others to order publications not cost effective.

More QST coverage for Affiliated Clubs and Special Service Clubs is being planned with an accompanying guide to assist Amateurs who want to submit the news. The League is scratching for innovative ways to increase activity in radio clubs to interest members under 18 and Amateurs licensed less than a year. Particular plans sought for elementary, and junior and senior high schools.

Now that QST pays authors for articles the flow has increased, but still not enough general interest articles received. Also looking for someone to write either a 75-year history of Amateur Radio or a set of ethical guidelines for use in contacting the radio and media.

Plans for a League van or trailer to be outfitted with an Amateur Radio mobile exhibit and operating station for promotion and demonstrations at fairs, schools, gatherings of public safety officials, is being explored with Amateur Radio industry representatives to find ways to best help the public gain knowledge of the hobby.

Call sign badges may soon be authorized for QSL Bureau Managers and workers, Technical Advisors, Volunteer Examiners, Volunteer Counsels and AIRS volunteers besides those League officials already in the program. Badge applications will still be handled by Section Managers and made by approved badge shops.

Packet and digital growth quickens as messages are routinely being exchanged on NTS and used in national emergency communications. The VHF trend is toward faster speeds with these modes. Traffic formatting recommendations needed for Packet band plan, progress slowly continues.

The 1989 ARRL National Convention, to be sponsored by the Vegas Valley Amateur Radio Club, was cancelled - it's a big undertaking. The League searches for a qualified host club, any volunteers? Some talk about International Conventions and a World QRP Day.

Electronic Communications Privacy Act of 1986 has been successfully modified by the League so that it will not adversely affect Amateurs, especially the right to monitor the radio frequencies.

Satellite communications celebrates the 25th anniversary of the OSCAR satellite series and anxiously awaits placement of geostationary satellites overhead.

Examination question pool may be turned over to Volunteer Examiner Coordinators (VECs) for their maintenance. The League awaits FCC response to postpone the effective date and hopes for reconsideration. The League's goal is to standardize questions and degree of difficulty to prevent shopping around for exams.

Canadian officials, concerned about Amateur gear bought from U.S. vendors, may implement new tariffs on over-the-border imports. They want to get the cost inequality back under control.

Novice enhancement program fuse is lit, will hopefully encourage more newcomers and keep those freshly licensed. Development of promotional plans will spread the word about the enhancements, may include new study manuals, code tapes and video tapes. Talk continues about extra Novice privileges for operating in KH6, KL7, Pacific and Caribbean Island areas.

DXCC Golden Jubilee for 1987 is already successful. Send your log of QSOs made with 100 countries this year to League Headquarters for certificate. League thinking about certificates for 25 and 40 years of membership in addition to pins now available.

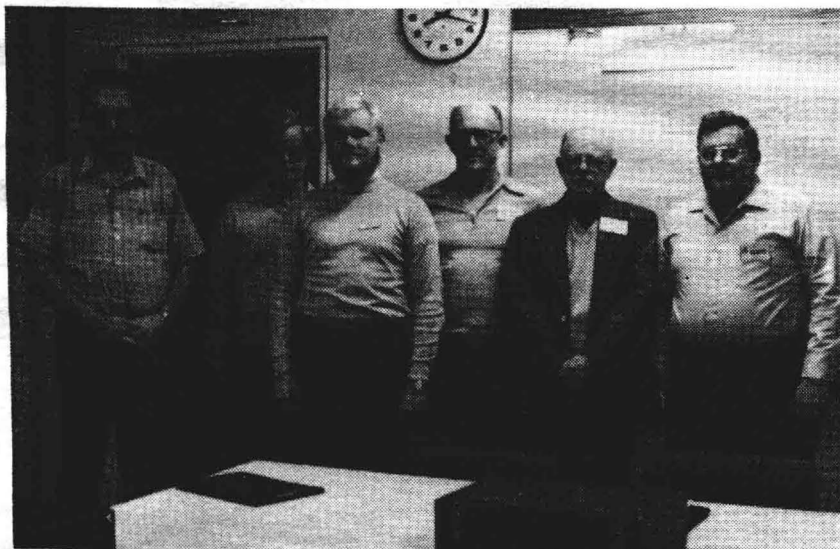
ARRL QSL cards with distinctive markings and color to be purchased by ARRL members is now getting a feasibility study. Only higher-ups qualify to purchase such exclusive QSLs now. Strong world-wide movement to use year-month-day order (YYMMDD) for QSL card dates, new cards will probably standardize this format.

Non-FCC issuance of secondary call signs is still a possibility, the verdict isn't in yet. You'll have plenty of time to select a call.

Reverse identification for reciprocal stations being heard on-air more often. For example: HK3/K3ZO rather than K3ZO/HK3.

FCC and League confer for best outcomes on automatic transmitter identification, cable television terminal devices, reduced power hours for RFI cases, implementing 18.068 to 18.168 MHz band, biological effect proposals of EPA for new levels and spread spectrum rules interpretation. Labelling of consumer devices, whether or not they are immune to RF, twice denied by FCC.... no labels yet. Some sparks of antenna and interference problems cautiously quenched.

Operating practices reviewed for a proposal to prohibit non-radio means of alerting in HF contests.... making finding rare DX or sections fair for everyone. No changes in PSHR criteria, recent poll produced scattered and foggy suggestions without consensus. Narrowband calling frequency, probably not for transistor lovers, is promoted as 10.368 GHz in the 3-cm Amateur band.



The Four Lakes Amateur Radio Club of Madison's 1987 Board of Directors is pictured at left: from left to right are Dick Burton, N9BAF (also Editor of FLARC's paper *The Feedline*); Jim Patterson, KC9GO; John Offerdahl, KC9XH; Don Liedel, WB9OQX; Frank Holliday, WB9NOV; and John Hicks, KA9KYB.

At right is FLARC President Ken Trachte, N9ADN.

Photos by K9ZZ.



The Wisconsin Packeteer

WISCONSIN AMATEUR
PACKET RADIO ASSOCIATION
P. O. Box 436
Cedarburg, Wisconsin 53012-0436

COMMODORE 64 HELP NEEDED.

I need information on the down loading of programs, that will allow them to be run when downloaded. At this time, when I download to the C-64, the programs are filed as sequential files, and can not be run. any information would be greatly appreciated..

DE NV6D - Arizona

KANTRONICS INTRODUCES A NEW PERSONAL MAILBOX OPTION.

Kantronics has recently introduced a new personal mailbox option.

Now you can have your own personal packet mailbox inside your Kantronics Packet Communicator. This new personal mailbox EPROM option allows you to leave messages, collect messages, and even allows others to leave and collect messages stored in your packet unit. The Kantronics personal mailbox is established, operated, and controlled from your keyboard, and uses familiar mailbox commands like SEND, LIST, READ, KILL and BYE. the Kantronics personal mailbox responds to a packet connect request, a call you have set (MYPBBS), but does not require your computer to be attached or operating. The number of messages is limited by the RAM available in your packet unit. The personal mailbox option is currently available for the KAM (Kantronics all mode), KPC-1, KPC-2 and KPC-2400. To add the personal mailbox option to your Kantronics packet unit, contact Kantronics or an authorized Kantronics dealer. The personal mailbox option retails for \$39.95 plus \$2.50 shipping if ordered from Kantronics and includes a replacement plug-in 256K EPROM and an installation/operations manual.

PERSONAL MAILBOX FEATURES:

- * Leave messages for others and others can leave messages for you.
- * If you want, others can leave messages for others.
- * Responds to a standard packet connect request made to personal mailbox call you have set (MYPBBS).
- * Established, operated, and controlled from your keyboard. Available from either radio port for KAM.

- * Uses familiar mailbox commands - SEND, LIST, READ, KILL, BYE.
- * Establishes autoforwarding to your personal mailbox from an established community BBS - no need to check in for your messages.
- * Does NOT require computer to be attached and operating.
- * Available now for KAM (Kantronics all mode), KPC-1, KPC-2, and KPC-2400.

VIA WB9QZB

RAM & EPROM IC'S FOR TNC-1 AVAILABLE

I have a fairly good quantity of the 2764-25 EPROM's (with WA8DED Version 1.1 multiconnect firmware installed) and the 6264LP-15 8K RAM' (used in the TNC-1 and TNC-2). If interested in any of these, let me know by E-mail or phone (612-432-0699 at home or 612-593-2875 at work).

de Carl - WA0CQG - Apple Valley, Minnesota

UPGRADED PBBS ONLINE IN LA CROSSE

The W9LZQ-1 system now features a greatly expanded BBS. The former system utilized the Model 100 Tandy Portable Computer and disk video interface for a BBS, but file storage problems began to crop up when it became overloaded with informational files. Also, the number of users of the system continued to increase at a fairly constant rate, so Kent decided to pull the plug on the Model 100 and install a new dedicated Epson Equity I computer with 20 mb hard disk. The system is using the WA7MBL Version 3.12 software program, with plenty of file storage available. The new version of the WA7MBL BBS software also supports binary file transfers for IBM-PC and compatible equipment. There are currently several files stored on the W9LZQ-1 system available for downloading via YAPP protocol.



WISCONSIN
GUIDE FOR NTS PACKET OPERATIONS
VERSION 1.0
FEBRUARY 10, 1987

The following information is a short guide for handling NTS traffic on the WØRLI compatible packet system.

1. NO BOOK MESSAGES PLEASE.

Please, one NTS message per BBS message. Remember that traffic eventually will have to be broken down to the individual addressee somewhere down the line for ultimate delivery. When the originator places two or more NTS messages destined for different addressees within one packet message, eventually the routing will re-

quire the message to be broken up by either the BBS SYSOP or the relay station, placing an additional unnecessary burden on them both. Therefore, it is suggested good practice for the originator to expend the extra word processing in the first place and create individual messages per city regardless if there are common parts with other messages. This means that book messages are not suitable at this time unless they are going to the same city.

2. NTS PACKET MESSAGE FORMAT SHOULD REMAIN THE SAME.

It is believed that the packet format of NTS traffic should be identical to that sent over CW, allowing easy compatibility to both CW and RTTY files should the individual messages need to be transferred from one mode to the other without requiring major word processing..

3. USE ACCEPTED DESIGNATORS.

Common sense and good operating practice dictate using State, Province, and U.S. possession abbreviations as spelled out in the U.S. Post Office and the ARRL Net Directory. Since one should always know at least the state that the traffic is going to, and since the correct abbreviation spelling is readily available, and since these designators are less than 70, they appear to have a decided advantage over other systems such as section, region, or grid square designators which would require more SYSOP intervention and/or more difficult user interface.

4. OPERATIONS.

NTS traffic should be entered on WØRLI compatible forwarding systems with the "ST" command. Examples:

"ST CA" <CR>
"QTC 1 SAN FRANCISCO" <CR>
"ST NV" <CR>
"QTC 1 LAS VEGAS" <CR>

Remember to use the "I" in the "ST" command or your message will not be able to be killed with the "KI" command at the end point. Do so only after you are sure you have a valid copy. This erases the message so it won't be delivered twice. On some systems it also sends a SVC message back to the originator stating that the message has been picked up and by whom and when.

To list NTS traffic on the WØRLI BBS network, simply type "LT".

5. MORE HELP ON FORMAT AND USE.

Radiogram format should follow the standard ARRL radiogram message format in order to maintain the necessary information to interface with section nets, tracing, and record keeping.

Standard ARRL message form requires a number, station of origin, word count (check), place of origin, date and time. Give as full an address as possible. Separate the text with a "BT". End the message with the signature and the prosign "AR". Sending "CTRL Z" will send the message to the mailbox.

6. SAMPLE MESSAGE.

When connected to a linked BBS, the below example should be followed and the message format adhered to:

PROMPT> (NOTE: The ">" is your prompt)

ST AZ (Select supported designator from list)

ENTER TITLE FOR MESSAGE:

QTC 1 PHOENIX AZ

ENTER TEXT AND END WITH A CTL-Z:

NR1 N9BYS 20 BURLINGTON WI 1835Z JAN 25

MR. JAMES BJORKLUND

8830 CROSSWAY DRIVE

PHOENIX AZ 85040

602 458 3598

BT

HI DAD ARRIVED SAFELY AT (5 WORDS PER LINE

BURLINGTON X HAVING A NICE OF TEXT)

VISIT X AM LEAVING TOMORROW

X WILL WRITE SOON LOVE

BT

JOHN

AR

CTRL-Z

In the address, be sure to show all helpful address information, (i.e., apt. number, trailer number) etc.

Amateurs are encouraged to use the NTS frequently. The experience will be fun, but most important, the experience will also give you training for emergency communications, which all amateurs should be able to work with when the occasion demands.

See if you can deliver NTS traffic and help make the system work by typing "LT" which lists all NTS traffic. To read the message, just type "R" and the message number. If you can deliver the message then please type "KT" and the number. If you don't use the "T" after the "K", then it won't be deleted and needless duplication will result. If by chance, you kill a message that you find you can't deliver, please re-enter the message back onto the mailbox as you found it.

If there are any additions, deletions, corrections, anything at all that I might have left out please let me know and I will put out a corrected guide.

73'S...Carl...N9BYS

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TRUNKING FREQUENCY FOR DIGIPEATERS

KD9ZF

The subject of "trunking" is new to most Packet operators. This type of communications involves linking the digipeaters on another frequency, allowing the existing channel to serve the local area. Because the trunked system is smart, it has the capability to think not only for itself, but it can think for everyone else trying to communicate from one area to another. This complexity is the reason why software has not been developed until recently.

We would like to pioneer the first "trunking" system in Wisconsin. This same system has just been completed and is on the air in the Dallas, Texas area.

There are many Hams involved in the project in Dallas, but one of the VIPs is Tom Ashenbrenner, WB5PUC, who is a native of Manitowoc, WI. He has developed the software to make this trunking system possible. Tom is the designer who has brought us the software on the N9AXV system in Manitowoc (which now has a new call, KD9ZF). This system has weather access, conference bridge, and many more features.

John, WA9SOU, is very much interested in linking to the trunked system. I have not met with Gary, WB9SDA, but I'm sure that he would like to become involved with the system. Having a trunked system tied to Baraboo, Fond du Lac, and Manitowoc would be a good demonstration of this new means of data transfer.

In order to make this trunk efficient, it must be free of interference, and also allow for fade margins. In order to make the system fast, it must be capable of high speed data flow. It is for these reasons that the 440 MHz band was chosen in the Dallas area. The baud rate selected was 9600. The frequency I recommend for the State of Wisconsin is 445.100 MHz. This frequency is now coordinated with the State of Texas as the "trunked" channel. It may be possible to coordinate the entire central region of the United States with this channel.

Because of the trunked system being smart, it is programmed to know what stations to talk to, so selective beam headings are recommended. The bandwidth for proper data flow at 9600 baud is 40 KHz. It is for this reason that we request three channels, one above and one below 445.100 MHz. If channel spacing is 30 KHz, it is recommended that 445.070 - 445.130 be assigned to the Packet Radio trunk.

There are several advantages to the trunked system. Channel congestion while digipeating is no longer a severe problem. The wide area digipeating is done on the trunk, while local digipeating is maintained on the traffic channel. Packets will not become "smashed" by co-channel users while trying to digipeat thru several systems.

Each system has a CPU. This means that an ACK must be recognized while moving thru the links on the trunk. Unlike the conventional means, if your signal does not get to the receiving station, or if the receiving station's rig is off, the retries NEVER come from your station; they come from the digipeater associated with the trunk. As long as your rig gets to the first digipeater that is on the trunk, your message is saved until the retries on the trunk are clocked. Then, and only then, will you see a response from the system.

Now that each location is smart, it can now consolidate information at one location. For instance, the Manitowoc system has a NOAA Weather Service wire line set up for access. It accepts product codes off this service and stores them for transmissions to Packet operators. With the trunked system, each software associated with each trunked location would now know where to get the weather, while the operator using his Packet station at his house would not have any idea where or what was occurring, because the software on the trunk now knows where to go to get the weather info.

Same thing with message service, a consolidated memory bank to store messages. This would not only save traffic on the main Packet channel (145.10), but is also cost effective, because you need only one memory bank, instead of several or one per city. These are no longer needed.

Manitowoc is now in the process of obtaining the equipment needed to proceed with a link for trunking pending approval for acceptance of this experimental system. Also with the equipment is the 5 megabyte storage needed to handle any of the trunks message service. Also, the weather service will be available to anyone involved in the trunk.

As a final note, the software is available at no cost from Dallas. CPU components and boards at this time are at a cost of about \$150.00. The RF cost is variable, depending on availability at your local level.

Ron, WB9MFB, who is tech support for the KD9ZF system, and myself are available to reply to any inquiries.

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PACKET SYSTEM FOR ILLERATE HAMS

From the GEARVAKf Bulletin
Winter 1986

The GEARVAKf Technical Experimentations Committee (GEARTECH) has just announced the development of a new packet system designed to help illiterate hams work the packet mode. The new packet system, called PACRITE, eliminates the need for illiterates to ask the educated elite to help them type out and decipher their packet QSOs. PACRITE actually spells out the words for the illiterate ham right on the screen in front of him or her!

An additional refinement of the PACRITE system is awaiting the perfection of VoicePac, a method of direct digital conversion of the operator's voice to a transmitted packet. According to GEARTECH Chairman, Dr. Avruell U. Harnishe, "VoicePac seems to work well, except that a method of decoding the voice-encoded packet has yet to be discovered."

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PACKET INSTALLED AT GEARVAKf HEADQUARTERS

From the GEARVAKf Bulletin
Winter 1986

A new packet communications system has been installed at GEARVAKf Headquarters, according to GEARVAKf Directors Drs. Felix R. Onehundredton and Elwood P. Lishnus. The new system was donated by Flagshape Communications, Inc. of Barksville, Ohio, and was placed in operation on December 11, 1986. Operators at the GEARVAKf Memorial Ham Station are still awaiting return of a series of packets sent on that day. Once they are received, new packets will be assembled and transmitted.

--K8DMZ

=====

A \$300 part will protect a fuse by blowing first.

Wisconsin Nets Association Ltd.

WISCONSIN NETS

NET	WNA	FREQ	UTC	CST	MANAGER
BWN	YES	3984	1200Z	0600	WD9IID
BEN	YES	3985	1800Z	1200	KA9RII
WSBN	YES	3985	2330Z	1730	WB9ESM
WNN	YES	3723	0000Z	1800	N9DGL
WSSN	YES	3645	0030Z	1830	N9BDL
WIN-E	YES	3662	0100Z	1900	WB9ICH
WIN-L	YES	3662	0400	2200	KC9CJ
NWTN	YES	34/94	0030Z	1830	W9ZZM
WCWTN	YES	31/91	0030Z	1830	KD9TT
GR.BAY	NO	72/12	0245Z	2045	WB9NRK
			THU	WED	

Section Manager's notes



JANUARY 1987

Richard R. Regent K9GDF
5003 South 26th Street
Milwaukee WI 53221

K9VGE received Half Century Award for confirming 50 grid squares on 432 MHz.

KD9ZF working on trunking system for repeaters.

ManCoRad has qualified as a Special Service Club.

New officers Riverland Amateur Radio Club: Pres. NI9V; V. Pres. KA9UUK; Sec./Treas. KOJYB.

New officers-Rock River RC: Pres. WB9ADB; V. Pres. W9BCV; Sec. KA9BAC; Treas. KA9FNE.

Congratulations to new Official Observers K9RGV and N9ADQ. If you are interested in becoming an OO let NC9G know.

Licensed over 25 years ago? Check with me for information about the Wisconsin Chapter of the Quarter Century Wireless Association.

Plaque for fifty years with ARRL to W9OVD and W9YCV.

April 4th, exams begin 9 a.m. at Wauwatosa East High School, 74th and Milwaukee Avenue, with W9SNK.

April 5th, Madison Swapfest, Dane County Expo Center Forum Building, 8 a.m., sponsored by Madison Area Repeater Association. (Exams NOT scheduled - K9ZZ).

April 18th, walk-in exams begin 9 a.m. at WCTI, 800 Main Street, Pewaukee, with WD9JKZ.

New net manager of North Woods Traffic Net is W9ZZM.

Regret to report Silent Keys K9MPY, KA9BAH and W9YYW.

By coincidence, K9GCF and K9GDF attend the same church.

CAND REPORT JANUARY 1987 X 612 MESSAGES IN 31 SESSIONS X D9RN REPRESENTED 100 PERCENT X WISCONSIN STATIONS KC9CJ WB9WGD KA9RII W9ODV N9BGE X 73 - JERRY W5KLV NM.

WISCONSIN NETS - DAILY NCS SCHEDULE

NET	POSITION	SUNDAY	MONDAY	TUESDAY	WEDNSDAY	THURSDAY	FRIDAY	SATURDAY
BWN	NCS ALT NCS	NO NET NO NET	KC9CJ	K9JPS	KC9CJ	AG9G	KA9BHL	KB9GO
BEN	NCS ALT NCS	WB9ICH	W9YCV	KA9CPA KA9KLZ	WA9SLZ KA9RII	WB9PKL	WC9AAG W9DLY	WD9FRI KA9OBP
WSBN	NCS ALT NCS	KF9K WB9ICH	NI9E KD9FC		KA9RII K9FWE	K9UTQ	WA9USD	NC9G
WNN	NCS ALT NCS	N9DGL	KY9P	NI9R	KA9RZL	KA9OBP	N9BDL	KA9MSR K9DHR
WSSN	NCS ALT NCS	NC9G	KA9OBP W9NGP	NI9R	WB9ICH	N9BDL	AG9G	KY9P N9BDL
WIN/E	NCS ALT NCS	W9YCV	WB9ICH	W9CBE	W9NGP	N9BDL		KA9OBP
WIN/L	NCS ALT NCS	AG9G	KC9CJ	W9UW	W9YCV	KC9CJ	KC9CJ	KC9JC

2/6/87 WB9ICH WNA

WHAT'S MANCORAD DOING?

Richard R. Regent K9GDF
5003 South 26th Street
Milwaukee WI 53221

Ever wonder what other Wisconsin clubs are doing? Wonder no more, here's a few facts about one sharp club, the MANCORAD. The Radio Amateur Club of Manitowoc County, MANCORAD, was organized in 1946 and became a League affiliate in 1947.

Members of this group, many of whom are also RACES members, are prepared for emergency communications and cooperate with the Local Red Cross which provides a room for their club station, W9DK. During the year, they participate in emergency drills, NOAA weather alerts, and also furnish communications and help operate the local Emergency Government setup of Manitowoc County during tests. In exchange, the club gets free use of antenna tower space for their repeater.

Club arms open wide for those who want to learn about Amateur Radio through club training courses for Novice, Technician and the General class, or get tutored on a personal basis by some of the members. The club has six eager members who have applied to become ARRL Volunteer Examiners and hopes are to have a complete and thorough Volunteer Examiner program for all classes of licenses.

Club technical activities are quite varied and a sample of topics include satellites, packet radio and repeaters. For example, WB9MFB is busy expanding coverage and adding features to his repeater and packet system, while WB9ESM works on a repeater and is knowledgeable in HF traffic handling as Net Manager of the Wisconsin Side Band Net. Members enjoy technical programs which show League films and invite guest speakers to talk about the latest information, in addition, several simply help each other and local hams to

mation and enjoy being a Ham. There are an inkling of the activities which have qualified MANCORAD to apply for Special Service Club status. For more information about the Club, please write to the MANCORAD Secretary, Daniel J. Fischer, N9FVZ, 918 North 21st, Manitowoc, WI 54220.

Badger State Smoke Signals plans on having a big special issue next month and will be at the Jefferson swapfest on March 22, at the MARA swapfest in Madison on April 5, and may be at others. Be sure to look us up. We will have some special offers available and would like to know what you would like to see in B5SS.

If you will have a booth or table at Madison, get in touch with Jim, K9ZZ, or Ken, K9EN, (address on page 2) about the advertising specials available in the next issue. We will be mailing extra copies to area hams and will have plenty of extra copies to hand out at the swapfest. This will be a great opportunity to get word of your products/services to attendees and the stay-at-home gang.

We welcome pictures, drawings, and all kinds of articles about operating activities, technical achievements, humorous, etc. Let us know of the Amateur activities of yourself, your clubs and others.

Don't forget, if you have something to buy, sell, or trade, the pages of B5SS are available to speed up your quest. Our want ads are effective and the rates are very low.

Have you ever wondered why you can't find a paper clip when you need one? It seems the paper clip is the embryo state of the wire coat hanger. The profusion of coat hangers in the closet shed light on the disappearance of the paper clips.

73 de bsss staff

ADAMS COUNTY NOVICE CLASSES

Mid-State Technical Institute, Adams County Center, will be scheduling Novice classes beginning in mid to late February. The class will be held at the center at 401 North Main Street in Adams. Code, theory, and regulations will be taught, leading toward the test for the Novice license. To register, stop in or call (608) 339-3379 during normal daytime business hours or evenings from 6:00 pm.m to 8:00 p.m. Monday thru Thursday.

--K9CJM

PART OF 220 TO LAND MOBILE?

On February 12, the FCC released a Notice of Proposed Rule Making, General Docket 87 14, that proposes to allocate 220 to 222 MHz on an exclusive basis to the Land Mobile Service.

According to the FCC, the 220 to 225 MHz band is underutilized, and that the Land Mobile Service has needs that can be met in this region of the spectrum.

Therefore, the Commission is proposing that the lower 2 Megahertz, 220 to 222 MHz, be reallocated on a primary basis to the Land Mobile Service for both government and nongovernment operations and the existing primary allocations to the

Amateur, Fixed and Mobile Services be deleted.

Accordingly, the FCC proposes to allocate the remaining 3 Megahertz, 222 to 225 MHz, to the Amateur Radio Service on a primary basis.

Comments on this proposal may be filed on or before April 6, 1987. Reply comments may be filed on or before April 21, 1987. See The ARRL Letter and QST for further details.

WRITTEN EXAM CREDIT

FCC has announced that written examination credit for Amateur Radio exams, PR Docket 86-63, will become (became) effective February 13, 1987.



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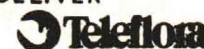
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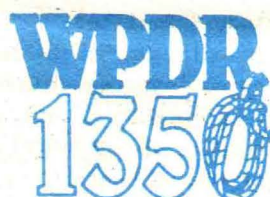
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